(GH); *Marie-Victorin 28491* (GH); *Marie-Victorin & Rolland-Germain 25793* (GH, US), *27117* (GH), *29264* (GH), *45674* (GH), *47459* (GH). Prince Edward Island: *Fernald & St. John 10988* (GH). Nova Scotia: *Bissell & Linder 20733* (GH); *Fernald & Long 23583* (GH); *Long & Linder 20732* (GH), *20735* (GH); *Nichols 79* (YU), *542* (YU, GH); *Pease & Long 20734* (GH, US). Newfoundland: *Pease & Edgerton 27216* (GH).

Luzula acuminata Raf. var. **carolinae** (S. Wats.) Fern. UNITED STATES: Alabama: *Harper 3703* (GH, US), *3956* (US). Georgia: *Allard 81* (US), *82* (US); *Cronquist 4979* (GH); *D. Eyles 6863* (GH); *Harper 2056* (GH, US), *2062* (GH, US); *Hermann 10186* (GH); *Muenscher & Smith 2954* (GH). South Carolina: *House 1847* (US); *E. J. Palmer 35405* (GH). North Carolina: *Correll 5020* (GH); *Godfrey 3414* (GH), *3814* (GH); *Godfrey, Campana & Fox 48070* (GH); *Godfrey & Fox 50307* (GH); *Godfrey, Fox & Woods 49111* (GH); *Godfrey & White 7013* (GH, US); *Gray & Carey* (July, 1841) (GH-HOLOTYPE); *House 4130* (US); *Hunnewell 10272* (GH), *14188* (GH). Tennessee: *Hunnewell 15158* (GH); *Nease 194* (US). Kentucky:*Mcinterr & Shacklette 615* (US). Ohio: *Leonard 551* (US), *552* (US). West Virginia: *Dickey 244* (GH); *Fosh 1034* (US). Virginia: *Fernald & Long 6958* (GH), *6959* (GH), *6960* (GH), *6961* (GH), *7787* (GH), *7788* (GH), *14526* (GH); *Fernald, Long & Abbe 14123* (GH); *Fernald, Long & Pease 11657* (GH, US), *11658* (GH); *Grimes 3400* (GH).

THE OCCURRENCE OF SPIRODELA OLIGORRHIZA IN THE UNITED STATES

EDWIN H. DAUBS[1]

Spirodela oligorrhiza (Kurz) Hegelm. of the Lemnaceae was first reported and described by Kurz (1867) from India under the binomial *Lemna oligorrhiza*. Shortly thereafter Hegelmaier (1868) transferred the species to the genus *Spirodela*, and reported its further occurrence in Australia and Java. At the same time he also described and named four varieties. Later (1896) he gave each of these varieties species status.

The species remained unreported outside of this Far Eastern area until Saeger (1934) recorded it from two locations in Missouri. The first of these was made by him in Swope Park, Kansas City, and the second by F. H. Woods from a pond in southwestern Missouri. It is also reported that this pond contained goldfish, indicating the probability

[1]Department of Botany, University of Illinois, Urbana.

that the plant was introduced from commercial supply sources for domestic aquaria. More recently, Mason (1957) has reported the plant as occurring in the vicinity of Berkeley, California, but without a specific location, and this appears to be another instance of the same nature as reported by Saeger.

Within the past few years however, a considerable number of new collections from widely separated areas have been made. The author has collected this species from six locations in Florida, two in Louisiana, and from one in Illinois. The voucher specimens for these collections are in the Herbarium of the University of Illinois. Also from Florida five collections were reported (personal communication) by Professor R. K. Godfrey and Richard D. Houk.

The specific citations for my own collections are as follows: FLORIDA. — PASCO CO., small pond south of Mazaryktown along U. S. highway 41, Feb. 1, 1961, *Daubs 651;* SARASOTA CO., drainage ditch along Fruitville Road east of Sarasota, Feb. 3, 1961, *Daubs 666;* HILLSBOROUGH CO., ditch along U. S. 301 north of Tampa, Feb. 9, 1961, *Daubs 670;* PASCO CO., pond north of Dade City along U. S. 301, Feb. 9, 1961, *Daubs 671;* SUMTER CO., ditch along roadside near junction of U. S. 301 and Fla. Rd. 42, Feb. 9, 1961, *Daubs 672;* MARION CO., pond near U. S. 301 between Ocala and Pedro, Feb. 9, 1961, *Daubs 673*. LOUISIANA. — ST. CHARLES PARISH, ditch along U. S. 90, 1/2 mile east of Bouette, May 31, 1961, *Daubs 782;* LA FOURCHE PARISH, ditch along U. S. 90, between Raceland and Houma, May 31, 1961, *Daubs 786*. ILLINOIS. — ALEXANDER CO., Horseshoe Lake, Nov. 24, 1960, *Daubs 545;* same location, June 2, 1961, *Daubs 803*.

From California, Dr. L. R. Heckard of the Jepson Herbarium, University of California, Berkeley, reports (personal communication) a collection of *S. oligorrhiza* from Millerton Lake, *Bacigalupi and Heckard 7693*, Apr. 30, 1961, "most certainly naturally occurring" and further remarks, "There must be many more localities in California".

This recent plethora of reports is probably not due to any sudden widespread dissemination of the species but rather to the failure of potential collectors to identify it from eye level, confusing it with *Lemna minor*, to which it is usually similar in size. It can be easily separated from any of the *Lemna* species through the possession of more than one root,

usually 2-4, and from *S. polyrrhiza* which usually has 5-many roots, and is orbicular to obovate in shape, as well as usually much larger in size. It would appear that *S. oligorrhiza*, most probably introduced as indicated, has now become well established in many areas, and will doubtless continue to spread throughout the area to which it is adapted. The plant is not known to produce the familiar overwintering turions found in *S. polyrrhiza*, but it flowers rather readily and the seeds may provide an adequate overwintering form for those areas too cold for vegetative survival.

LITERATURE CITED

HEGELMAIER, F. 1868. Die Lemnaceen. Leipzig.

———. 1896. Systematische Übersicht der Lemnaceen. Bot. Jahrb. **21**:268-305.

KURZ, S. 1867. Enumeration of Indian Lemnaceae. Jour. Linn. Soc. Bot. **9**:264-268.

MASON, H. L. 1957. A flora of the marshes of California. University of California Press, Berkeley.

SAEGER, A. 1934. *Spirodela oligorrhiza* collected in Missouri. Bull. Torr. Bot. Club **61**:233-236.

PASPALUM FIMBRIATUM IN THE UNITED STATES

DONALD J. BANKS

While searching for plants of the Setacea group of the genus *Paspalum* in southern Florida, I found several plants of *Paspalum fimbriatum* HBK. growing under natural conditions. This annual species is very distinct because of its winged spikelets. It has not been previously reported as occurring in the continental United States. According to Chase (1929), the species has been collected in Panama, the West Indies, northern South America, and the Hawaiian Islands.

Erdman West[1] of the University of Florida reported receiving recently for identification a sample of *fimbriatum* which had been collected in a lawn near Homestead, Dade County, Florida by F. C. Craighead on Sept. 7, 1961 (FLAS *82141*). West remarked that *Paspalum fimbriatum* had been planted in the "old grass garden" at Gainesville and was collected Aug. 19, 1922 by W. E. Stokes (FLAS *3545*)

[1]Personal communication.